11: India G-4, 5 (1960-1961) 1962 AWll Kerala AWll

1.9 The distance within which these rivers descend to the sea level being very short, there are generally a large number of steep falls or a series of cascades in their courses. These provide a rich potential for generation of hydro-electric power, which can be generated at a low cost (1.7 nP per kWh on an average). This low cost power potential is an important asset of Kerala from the point of view of the future programmes of industrialization.

1.10 Some other implications of topographical features are not so obvious. For example, the lakes, the lagoons and the backwaters fringed with coconut palms, no doubt, impart to Kerala its characteristic scenic beauty and provide one of the chief tourist attractions. Their importance, however, goes much beyond the purely aesthetic aspect. In fact, the backwaters—especially in the Travancore-Cochin region—are indirectly responsible for providing the means of livelihood to a vast section of the population. Coir spinning, the chief industry of Kerala, is located in this State primarily because of the natural retting facilities provided by the backwaters. The availability of these facilities is unique in the case of Kerala. In almost all other coconut-growing areas of India, the coconut husks go waste because of the absence of natural retting facilities. Since coir industry provides an occupation to 4 to 5 lakh persons (about 10% of the total working force and 40% of industrial working force), one can well imagine what the unemployment situation in Kerala would have been in the absence of the backwater facilities. The backwaters have also facilitated the development of a wide network of inland waterways all along the coastline. Apart from employing a large number of persons in towing or rowing the boats, the inland waterways provide inexpensive modes of transporting the agricultural produce and light industrial goods manufactured in the coastal area.

1.11 Up till now only some of the favourable consequences of physical features have been pointed out. The sloping terrain and preponderance of backwaters in the coastal area also possess a negative aspect. The heavy downpour is gradually leaching off the mineral content of the soils, thus rendering them generally poor in their fertility status. One of its ultimate consequences is the fact that livestock feed available in Kerala is deficient in mineral content and this in turn reduces the yield of milk of the livestock. The heavy precipitation of rain also creates a serious flood control problem in Kerala.

1.12 The backwaters raise other problems as well. During the dry summer months saline water from these flows into the lower reaches of the rivers, many of which fall into the backwaters. This has an adverse effect on cultivation and the supply of drinking water in the coastal areas. Coastal areas are, therefore, beset with the problem of salinity control. The chain of consequences does not stop here. Recently implementation of one of the important salinity control measures in Kerala, viz., the Thanneermukkom bund across the Vembanad lake has created a new problem in its wake. The accretion of limeshell deposits, an important raw material found in the lake, depends on the high salinity of the lake water. Since, after putting up of the barrage salinity of water will get reduced, it will have adverse repercussions on the long run supply position of the limeshells. This, in turn, jeopardizes the long run prospects of the cement industry in the State which is based on the limeshells.

[Text continues on p. 6]

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50 per cent higher than at the all-India level. Agricultural crops and the plantations, which form the main component of the primary sector, are largely produced for the market and are the basic factors responsible for imparting a high level of productivity to this sector.

1.26 Agriculture in the State is characterized by a high value yielding cropping pattern, good physical yields, a high intensity of cropping and superior cultivation techniques. During 1956-57 the intensity of cropping[1] was 119 per cent (all-India—113%). However, if field crops alone are taken into account, the cropping intensity shoots up to 150 per cent. It is the latter percentage which is the more relevant one, since the area covered by the perennial crops is irrelevant from the point of view of double or triple cropping. All these factors combine to make the agricultural sector of Kerala highly productive, the average level of agricultural output per net cultivated acre in Kerala being about Rs. 360 against Rs. 125 for the whole of India.

1.27 Kerala owes the superiority of its cropping pattern to the large number of high value yielding plantation crops grown in the State. Coconuts, the most important among these, occupy about 20 per cent of the gross cropped area and yield Rs. 450 per acre on an average. Other cash crops in the order of their importance in terms of area covered are pepper, rubber, arecanut, tea, cashewnut, cardamom, and coffee. Taken as a whole, they cover approximately 40 per cent of the gross cropped area.

1.28 Apart from the high productivity aspect of the plantation crops, they are of significance to the economy from two other angles. First, these crops provide the raw material for some of the key industries of the State. Coir making, the most important industry of the State, utilizes the outer husks of the coconuts. Similarly, cashewnut industry, the second most important industry of Kerala, also draws its raw material from the agricultural sector. Besides these, Kerala holds almost a complete all-India monopoly in the production of rubber, which is another important industrial raw material. Secondly, plantation crops derive their prominence from the fact that a large number of crops grown in Kerala find a good export market and are, therefore, very good foreign exchange earners.

1.29 One other feature of the Kerala economy which owes its origin to the agricultural sector may also be pointed out. Unlike the rest of India, where barter trade is still prevalent on a significant scale in the rural areas, Kerala economy is highly monetized. The large number of cash crops grown in the State are all brought to the market for sale. Secondly, since a high percentage of food requirements are obtained from the other parts of India, they are again channelled through the market. A high degree of commercialization of Kerala economy is one of the factors responsible for absorption of a large section of the population in the tertiary sector.

1.30 Otherwise agriculture in Kerala carries with it all the disquieting features common to Indian agriculture. The pressure of population on land is even severer here. The average size of holdings in Kerala has dwindled down to 1.5 acres

[1] Intensity of cropping is the ratio between gross cropped area and net sown area. It gives the degree to which a given piece of land is utilized.

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India coastline, 30 per cent of the country's fish production came from the coast of Kerala. There is, however, still ample scope for increasing the output of fish. Only the fringe of the potential for off-shore fishing has been tapped up till now. Similarly, it is believed that the output of fish can also be increased considerably from the coastal fisheries without subjecting the fishing grounds to undue pressure. Introduction of mechanized fishing and better fishing gear can add considerably to fish production. However, as it is, the fishermen are the most depressed class of persons in the economy, and unemployment is at its maximum among them.

1.42 Development of fisheries is of particular importance in case of Kerala in view of the large food deficit of the State. The requirements of rice for a balanced diet could be considerably reduced if it is adequately supplemented by tapioca and fish. Tapioca by itself is not an adequate substitute for rice requirements since it lacks in proteins. However, its food value can be considerably enhanced if it is combined with a sufficient quantity of fish.

Secondary Sector

1.43 The secondary sector covers mining and industry. Mining activity is comparatively limited in Kerala in view of the meagre occurrence of minerals. During 1955-56 mining contributed only 0.6 per cent of the State Income (all-India 1%). The chief mineral asset of Kerala is the beach sand. Ilmenite is the most important variety of the beach sands. Besides some fine quality china-clay, of which there are good reserves, other items of mineral wealth of Kerala are not of any particular importance.

1.44 The industries of Kerala, both the factory[1] and the non-factory type, are marked by a low level of productivity as shown by Table 4. The main reason for this is the backwardness of technology employed as would be true of other parts of India as well. While this may not apply to the modern industries run on a large scale basis, in some of which indeed the State has been a pioneer, the overall picture of industry presented as a whole is, nevertheless, one of poor technological level. Further, during 1955-56, the organized factory industries employed 17.5 per cent of the working force in the secondary sector (9.7 lakhs) as against 21.8 per cent in India. Moreover, in both the factory and the non-factory categories, the major share of employment opportunities is monopolized by a few industries which can by no means claim to be in the forefront of modern industries.

1.45 In the non-factory sector, out of a total working force of 7.8 lakh persons, almost 50 per cent of the workers are employed in the coir industry, the foremost industry of Kerala. As in most cottage industries, the maximum degree of mechanization in coir industry never goes beyond a spinning wheel. In Malabar, even that is missing, since spinning operations are mostly carried on with hand. Similarly in the factory sector, the three major industries, viz., cashewnut, textile and coir factories which account for 64 per cent of factory employment, are entirely unmechanized.

1 Factory type of units are defined as those falling within the coverage of Section 2 in (i) and (ii) of the Factories Act, 1948. These include all those factories employing more than 20 workers as well as those employing between 10 to 20 workers, if using power.

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Cashewnut industry, by the very nature of the process involved, does not require much of capital equipment. Although the average size of cashewnut factories is about 400 workers per unit, capital requirements in the industry hardly exceed Rs. 200 per worker. Even the coir and cotton textile factories in Kerala use only the handlooms. Existence of handlooms within the precincts of textile factories is, in fact, a unique phenomenon in Kerala (especially the Malabar region). Only a dozen out of over 300 textile factories use modern equipment. Nowhere else in India can this be seen.

1.46 The contrast between a well-developed primary sector and a backward industrial sector is also brought out by comparative wage statistics for the two sectors. It has already been pointed out that in spite of a high degree of unemployment in the agricultural sector, the wage rates and average household earnings, though low, do not compare very unfavourably with the average for all-India. On the other hand, the average annual earnings of workers in factories covered by the Payment of Wages Act are only Rs. 736 per worker. As may be seen from the table below, this figure is one of the lowest in the whole of India.

AVERAGE ANNUAL EARNINGS OF FACTORY EMPLOYEES, 1956

	Rs.
Andhra	595
Assam	1,526
Bihar	1,236
Bombay	1,415
Madhya Pradesh	982
Madras	950
Orissa	947
Punjab	991
Uttar Pradesh	1,014
West Bengal	1,142
KERALA	736

SOURCE: *Statistical Abstract of India* (1957-58).

Overhead Facilities

1.47 In respect of overhead facilities, Kerala is fortunately better placed than many other parts of India. This has been the result of a progressive policy followed by the Governments of the erstwhile States of Travancore and Cochin, whose rulers took an active interest in the development of various public amenities and tried to attract industrialists from other parts of India to invest in Kerala.

1.48 In the sphere of transport, the coverage of Railways is rather limited, total route mileaghe being only 543 miles. This is, however, more than compensated by the wide network of roadways, which in spite of its many drawbacks, is superior to that in most other parts of India. The extent of road mileage per 100 square miles as well as the vehicle density in Kerala are the highest in the country. Road transport is, in general, more suited to conditions prevailing in Kerala than Railways because of the uneven nature of the terrain.

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2.82 Against this, the total amount distributed through organized institutions in 1958-59, was only Rs. 2.49 crores. This leaves a large gap which is probably being met by money lenders who generally charge high interest rates. Since intensive agricultural development programme as suggested here would require large amounts of working capital for the various types of farm expenses, the need for expansion of rural credit facilities through organized institutions cannot be overstressed.

PLANTATION CROPS

2.82 The predominant place occupied by commercial plantation crops in Kerala's agriculture, both in terms of area covered and net value contributed, has been stressed previously. In view of their importance to the Kerala economy, they deserve a high priority in the development plans of the State. The plantation crops of Kerala include pepper, cardamom, arecanunt, coconut, rubber, coffee and tea. Since most of these crops are perennial and have a time lag of 5-7 years between the stage of plantation and crop maturity, their future development programme should be viewed on the basis of a long term perspective of 20-30 years. The extension of area under these would not result in any immediate increase in output. However, quicker increases in production are possible from existing area under these crops through increase in yields per acre by the adoption of better techniques, etc. There is considerable scope for improvement in the methods of cultivation. It is thus necessary to devise, both short term and long term programmes for development of plantation crops in the State which are discussed below separately for each cash crop.

Coconut

2.83 Coconut is the most important cash crop of Kerala. Natural conditions in this State are ideal for cultivation of coconut. The crop thrives well along the sea coast and in the interior up to an altitude of 1,500 feet. Kerala accounts for about 70 per cent of the area under coconut in India and for over 80 per cent of the copra and coconut oil produced in the country. Coconut is important to the Kerala economy in a number of ways. First, the outer husk goes to support the most important cottage industry of the State, viz., coir industry. The kernel is used for edible purposes and in addition it is the mainstay of a large number of coconut oil millers. Coconut oil, in turn, forms a raw material for the soap industry. Directly and indirectly this crop provides employment to over 5 lakh persons.

2.84 Coconut is not a regular plantation crop since it is not grown on large tracts as in the case of rubber, tea and coffee. It is grown in scattered patches along paddy fields, river banks, backwater stretches and in the compounds of residential houses. In view of these complexities it is difficult to estimate the precise area under coconut but rough estimates show that the area under coconut in Kerala is about 1.1 million acres. The district of Kozhikode has the highest (250,884 acres) and Palghat the lowest (11,556 acres) acreage.[1]

[1] The figures refer to 1958-59 crop year.

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The fall in the participation ratio between 1931–51[1] may be attributed to three factors:

(*i*) Rise in the sex ratio in favour of females.
(*ii*) Increase in the school-going population.
(*iii*) Slow growth in employment opportunities.

11.17 The force of the first two factors, however, is not sufficient to explain the steep decline in the participation rate. A fall of the magnitude, as shown in the above table, primarily indicates that the increase in opportunities for gainful employment has not been keeping pace with the growth of population which had increased by over 40 per cent between 1931 and 1951 without any corresponding growth of industries or development in other sectors.

REGIONAL VARIATIONS IN POPULATION DENSITY AND MANPOWER

11.18 Kerala is the most thickly populated State of India having an average density of 1,125 persons to a square mile according to the Census of 1961. The population, however, is not uniformly spread out as may be noticed from the district density figures in Table 58.[2] Malabar is less thickly populated than the Travancore-Cochin area. But the proportion of working force to total population, that is, the participation rate is also lower in the Malabar area. Generally, it is expected that participation rate would be lower in the more congested areas, because an over-crowded agricultural sector naturally offers limited scope for employment. The comparison of Travancore-Cochin and Malabar, however, seems to belie this conclusion. The reason for this contrast perhaps lies in the fact that the major part of the coir industry, the most labour-intensive industry of Kerala, is concentrated mostly in the Travancore-Cochin region.[3] Absence of this industry on a large scale in Malabar seems to account for a lower participation rate in that area.

Occupational Distribution

11.19 Occupational pattern generally gives a broad idea as to the stage of economic development attained by a country or a region. The distribution of working force between agricultural and non-agricultural sectors, is given separately for the rural and urban sectors, in Table 59.[4] A comparison with the all-India occupational distribution brings out a marked contrast in the case of Kerala. Whereas 71.8 per cent of the working force was engaged in agricultural occupations in the whole of India, in case of Kerala the proportion was only 51.4 per cent. In fact in Kerala the proportion of its population dependent upon non-agricultural activities turns out to be the highest in the whole of India.

[1] The difference in the concepts used in 1931 and 1951 Censuses perhaps exaggerates the extent of decline in the participation rates, but it does convey some idea of the fast deterioration in the unemployment situation over the years.

[2] Both these aspects have also been dealt with in Chapter 1.

3,4 [See p 310, category 116 -- Analysis]

11.20 As a general rule one associates a high proportion of working force engaged in non-agricultural activities with a high level of industrial development. However, the structure of industries and income contributed by industries[1] do not bear out this contention. Moreover, the Census of 1951 shows that 75 per cent of the non-agricultural population lives in the rural areas. This only goes to prove that the major part of non-agricultural activity is not organized on the lines of modern large scale industry but is composed of occupations more allied to agriculture which are located in the rural areas.

11.21 Two factors, which have already been referred to in a different context,[2] seem to be responsible for this peculiar type of occupational structure. These are:

(i) *Predominance of Perennial Crops*: Over 40 per cent of gross cropped area is covered by these crops (all-India 10%). Since these crops, once they are sown, require comparatively little labour for looking after them, tend to reduce the proportion of working force to the population engaged in agricultural activities.

(ii) *Small Size of Holdings*: Super-imposed upon this is the fact that the average size of holdings in Kerala is very small. This tends to push people away from agricultural to non-agricultural avocations. Coir industry, which is mostly located in the rural areas, is an important example of such non-agricultural occupations.

Changes in Occupational Structure

11.22 Between the Census of 1931 and 1951 population dependent upon agriculture increased from 34.2 per cent to 53.84 per cent. It brings out one fact quite clearly. Although the non-agricultural sector is quite large in terms of its existing employment potential, it has not been dynamic enough to grow at a rate sufficiently large to absorb the growing population. One other consequence of a growing reliance on agriculture, in spite of the congestion already existing there, is the rising proportion of agricultural labourers to total population. Cultivation of owned land cannot be expected to provide a reasonable source of livelihood for all the rural population, when as high as 50 per cent of family holdings are less than one acre in size. The proportion of agricultural labourers to total population, therefore, increased from 12.5 per cent in 1931 to 20.16 per cent in 1951.

PART II: PROSPECTS OF EMPLOYMENT

LABOUR FORCE AND UNEMPLOYMENT

11.23 Some indication has already been given of the high degree of unemployment prevailing in the economy of Kerala. Before proceeding to make a quantitative assessment of the extent of unemployment, it is desirable to clarify the definition of

[1] Chapter 9, Industries— Structure and Growth.
[2] Chapter 1 and Chapter 2.